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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,219	07/17/2000	Sanjoy Sen	10923RRUS01P	8426

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EXAMINER	
BLOUNT, STEVEN	

ART UNIT	PAPER NUMBER
2661	8

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/617,219	SEN ET AL.	
	Examiner	Art Unit	
	Steven Blount	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2004* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6, 8-11, 13 - 26, 30, and 46 - 49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *6, 8 - 11, 13 - 23, and 46 - 49* is/are allowed.

6)☒ Claim(s) *1 - 5, 24 - 25 and 30* is/are rejected.

7)☒ Claim(s) *26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 – 5 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 5,862,485 to Linneweh Jr. et al in view of U.S. patent 6,263,203 to Jahn.

With regard to claim 1, Linneweh Jr. et al teaches reserving first and second radio resources in both a wireless node and detected target node, and performing a handoff. See the abstract, col 8 lines 55+, col 4 lines 60+, and columns 2 and 6. Although Linneweh Jr. et al does not absolutely state that the resources be equal, the statement in the last paragraph of the abstract, that "The serving base site (101) then allocates (309) *the* reserved communication resource (127) to the communication unit (112) upon the communication units initiation of the priority call" (emphasis added) which nearly certainly implies that they are equal, and it would also be obvious to implement it in this fashion in any event. The examiner notes that in column 9, lines 6+, it is stated that "When the BSC determines that a handoff of the priority call is necessary, the BSC notifies (317) the target base site of the upcoming handoff". Linneweh does not, however, teach sending a relocation request message *from the first node* to the second node (ie, as noted in the previous sentence, Linneweh teaches sending it through the BSC).

Jahn teaches having base stations communicate directly with each other, wherein the communications involve information which would assist in the handover (see, for example, col 4 lines 35+ where it is stated that time synchronization data is transmitted between the base stations in order to "facilitate(s) a seamless handover". See also col 4 lines 1+ where advantages of using the invention are discussed).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have sent the "relocation request" message of Linneweh Jr. et al directly to the target node where the communication resources are reserved, in light of the teachings of Jahn, in order to provide a more efficient and quicker handover, as well as saving the expense of having to provide the intermediate BSC member.

With regard to claim 2, the operation in Linneweh Jr. is under control by a controller in the BSC 118 (see figures 1 and 2). With regard to claim 3, the examiner does not believe it would be beyond the ordinary skill in the art to realize the desirability of using the unused radio bandwidth resources for other purposes when not needed. With regard to claims 4 - 5, note that in column 4 lines 63+, handoff is performed when the class of service changes from one type to another (ie, one signal value to another).

3. Claims 24 – 25 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,438,370 to Einola et al.

With regard to claim 24, Einola teaches a method of performing handoff in a radio subsystem of a wireless network, comprising deciding which RNS to target (see, for example, col 8 lines 45+ and col 11 lines 19+), sending a relocation started message from the originating RNS to a core network, the core network coupling the RNS's (see,

for example, col 8 line 48) and receiving the message at the target RNS (see col 8 line 48) and reserving radio resources at the target RNS (Iu-links, see col 10 line 45, col 11 line 34, 48 and 63, col 10 lines 45+, col 12 lines 25+ ("binding identifiers for Iu links to be established"), and col 12, lines 15+). Sending an acknowledgement message is taught in col 14, lines 23+. Also, preparing by the acknowledge message a tunnel to the "CN" for uplink packets is taught in col 11 lines 43+ (see especially line 46), preparing by the "CN" a tunnel for downlink packets is taught in col 11 lines 56+, and it is noted that the Iu links, which are defined as being between the CN and the RNC's in col 13 lines 24+ download data between the respective CN and RNC's as taught in col 14 lines 28 and 33, in addition to being inherent in the teaching of Einola throughout. The examiner notes that a plurality of said Iu links are present, and this suggests that the originating and target RNS receive data on the downlink; and that it would additionally be obvious to send the data to both in any event. Also, although the target RNS does not reserve the resources as claimed on its own (it apparently does this with the help of the SNRC – see col 10, lines 43+), to have the RNS do it alone, instead of with the help of the SNRC, would be an obvious change well within the ordinary skill in the art. With regard to claim 25, see the relocation request message mentioned in col 11, lines 29+.

4. Claim 30 is rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,438,370 to Einola et al in view of Applicants Admitted Prior Art (hereinafter AAPA).

With regard to this claim, Einola et al teaches the invention as described

above, but does not teach buffering the downlink packets in the target RNC. Buffering packets in a similar manner is taught in the specification, page 2 lines 15+ and page 3, lines 3+ of AAPA. Therefore, it would have been obvious to buffer the packets of Einola et al in light of the teachings of AAA in order to increase system throughput.

5. Claims 6, 8 – 11, 46 – 49, and 13 – 23 are allowed.

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Most of applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. With regard to claim 24, applicant has stated that Einola does not teach a means for preparing by an acknowledge message, a tunnel to the CN for uplink packets. However, as noted in the rejection, an obvious variation of this is taught in col 11, lines 43+.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Seven Blount may be reached at 703 – 305 – 0319 Monday through Friday, 9:00 to 5:30.

Ajit Patel
Primary Examiner

SB
4/26/04